Impatiens L. is phyto-geographically a unique genus which has its greatest development in the Indian region and is mainly distributed in tropical Asia (Philippines, Sri Lanka, Myanmar, India and Indonesia), Africa and Madagascar. In India, it is represented by more than 210 taxa, mainly distributed in the Eastern Himalaya, North East India and the Western Ghats, with each area being characterized by its own species group.

While working on the floristic diversity of the Dhoni Hills in Palakkad district, Kerala, the present authors collected an interesting species of *Impatiens* from the grasslands at Palamalai. A detailed taxonomic study and perusal of relevant literature and type specimens at K and CAL confirmed that this species is *Impatiens concinna* Hook. f., a presumed extinct species of the Western Ghats, not collected after 1929 (ref. 5). A taxonomic description, distribution, ecology, phenology and IUCN status of the species has been provided along with colour photograph and illustration based on fresh specimens.


Annual herbs, erect, 15–40 cm high; stems simple to moderately branched, glabrous, terete, nodes swollen, purple in lower parts and the colour fades towards upper part. Leaves opposite, decussate, petioled to subsessile, oblong to lanceolate, 2–4.5 × 1–1.9 cm, glabrous, light green above, horrid beneath, serratures purple, cordate to rounded at base, spiny serrate at margin, aristulate at apex; lateral veins 4–7 pairs, prominent beneath; petioles up to 2 mm long. Flowers 1 or 2 per axil, 1.2–1.5 cm across, dark pink; pedicels 1.4–2 cm long, slender, glabrous, ascending or horizontal in flower, becoming pendent in fruit. Sepals: lateral sepals 7–10 × 1–1.5 mm, linear–lanceolate, acuminate at apex, glabrous. Petals: lip navicular, 10–18 mm long, acuminate, glabrous, purple standard petal-free and lies slightly behind the remaining whorls, 10–19 × 3–7 mm, ovate with a prominent mid-vein crest like at back, acute at apex, purple; lateral petals bilobed, 1.2–1.5 cm long, purple, distal lobes slightly longer than basal lobe; spur curved, 2–4 mm long, yellow. Stamina 5, united; filaments 3–6 mm long, flattened, membranous, glabrous; anthers 1.2–2.5 mm long, partly fused, yellow. Ovary linear–oblong, 3–7 mm long, glabrous, light green, distinctly five-grooved. Capsule ellipsoid, 1–2.4 cm long, green, glabrous, 2-seeded (Figure 1).

The exact locality of this species was not known, as evident from Gamble and Hooker. However, in 1874, Hooker just mentioned mountains of Malabar based on Wight’s collection, but interestingly Wight did not mention this species in any of his works and hence its type locality was previously not known. In 1917, Fischer collected this species from Atumalai, Ayyamalai hills, Coimbatore, Tamil Nadu at an altitude of 1600 m. Therefore, there are only three collections of this species available since its

**Figure 1.** *Impatiens concinna* Hook f. a–c, Habit; d, Adaxial and abaxial sides of leaf; e, Fruits.
**SCIENTIFIC CORRESPONDENCE**


**ACKNOWLEDGEMENTS.** We thank Arya Vaidya Sala, Kottakkal for providing the necessary facilities and TATA Trust, Mumbai for financial support. We also thank Dr V. Bhashkar, Centre for Plant Taxonomic Research, Bengaluru and Dr A. G. Pandurangan, JNTBGRI, Thrivananthapuram for their valuable comments and K. P. Vimal, K. Shinoj, V. S. Hareesh and A. J. Robi for help.

Received 16 January 2015; revised accepted 16 July 2015

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**Snowflake coral, Carijoa riisei from Grand Island, Goa: a case of invasion of an alien species or re-establishment of a native species?**

Invasion is an ecological phenomenon of introduction of organisms to areas outside their native ranges. It concerns all aspects relating to their transport, establishment and spread in a new region. An invasive species causes imbalance to the ecosystem by monopolizing food and spatial resources and consequently disrupting the native community. Biological invasion is presently one of the major sources of stress to the coral reef habitats, which harbour 25% of total marine biodiversity and contribute to 10% of total fishery production. In India, the coral reefs are located in the Gulf of Kachchh, Gulf of Mannar, Andaman & Nicobar Islands, Lakshadweep and some minor reefs are identified at Malvan (Maharashtra) and Grande Island (Goa).

A survey was conducted in the coral reefs of Grande Island, Goa, India (73°46'46.605"E, 15°21'0.636"N) in November 2014, during which the occurrence of Carijoa riisei (Duchassaing and Michelotti 1860) was observed from the site with colonies attached over a shipwreck (130 x 30 m) at a depth of 10–12 m (Figure 1a). Several colonies, white and beige in colour, were observed with branches 8–10 cm long and 3.5 mm wide (Figure 1b). Percentage cover of the species was calculated using a 1 x 1 m quadrat following English et al.

The species was identified based on its characteristic features, viz. presence of eight tentacles in each polyp and each axial polyp having several lateral polyps (Figure 1c), following Dhiyva et al.

The other coral species observed in the reef during the survey included Turbinaria mesenterina, Favites sp., Favites abdita and Dendrophyllia sp. The